





Sustainability Report 2025

Executive Overview









TUPY

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About this executive summary

This document is an executive summary of our 2025 Sustainability Report, which compiles the key operational, financial, socio-environmental, and governance highlights for the period from January 1 to December 31, 2025.

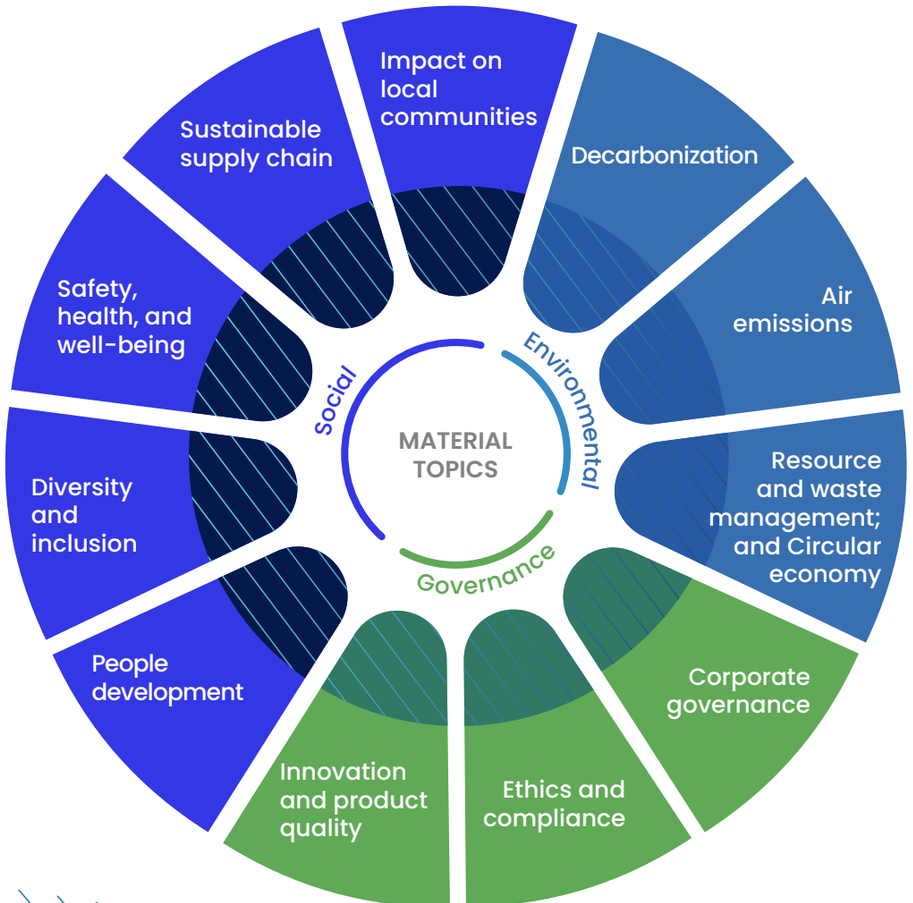
The content covers activities carried out in all countries where we operate, offering a concise overview of progress, results, and strategic priorities. Detailed information is available in the full version of the Sustainability Report, which was prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021 and the principles of the International Sustainability Standards Board (ISSB), which guide Integrated Reporting. The report also includes disclosure topics and metrics from the Sustainability Accounting Standards Board (SASB) for the Auto Parts and Machinery and Industrial Goods sectors, in addition to following the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Questions, suggestions, or requests for additional information can be sent to **sustentabilidade@tupy.com**.

Click here to access the full version of our 2025 Sustainability Report.

Material topics

We have adopted a dual materiality approach, which considers both the environmental and social impacts generated by our activities in the regions where we operate and the way external factors may influence our financial performance and the long-term continuity of our operations. The process involved an initial assessment aligned with our strategy and globally recognized guidelines, a comparative analysis with market peers, and consultation with management to evaluate the relevance of each issue in the business context. As a result, we identified 11 material topics, organized under the environmental, social, and governance pillars, which were validated by the Strategy, Innovation, and Sustainability Committee (CEISus) and the Board of Directors.



Message from the Executive Board

Tupy's history is marked by solid values, a long-term vision, and a deep commitment to excellence, which span generations and guide every stage of its journey. It is with great respect for the Company's legacy that the Executive Board and all of its approximately 18,000 employees have been working with focus and determination, convinced that we remain steadfast in our foundations and prepared to move forward, even in a challenging context such as that which marked 2025.

We experienced a year of sharp contraction in global industrial markets, a scenario that demanded even greater discipline and adaptability. We responded with what has always defined us: applied engineering, operational efficiency, and responsible decision-making. We made progress in optimizing assets, improving quality, and adopting increasingly cleaner and more efficient production processes, strengthening our resilience and supporting our customers during a time of heightened complexity.

At the same time, 2025 was a year of strengthening our identity. We made progress in building our corporate purpose, which more clearly expresses who we are and the role we want to play in a society undergoing transformation. Tupy has established itself as an engineering company, offering viable and scalable solutions for essential sectors such as mobility, sanitation, energy, and food production. Our commitment to viable decarbonization becomes even more essential to reducing environmental impacts without raising the cost of living or deepening inequalities.

Sustainability remains at the heart of our strategy, guiding how we think about the present and build the future. More than a set of guidelines, it is embedded in our culture and the way we create value over time. In 2025, this vision translated into concrete advances, particularly in promoting safer and healthier work environments, reinforcing our commitment to people and to the sustainable development of the communities where we operate.

Our traditional businesses remain the foundation of the Company, sustaining results even during adverse cycles. New businesses—especially in engines, generators, vehicle conversion, and replacement parts—are advancing with more dynamic growth, contributing to the diversification of solutions. At the same time, we have evolved in multi-fuel technologies, bio-plants, and promising projects such as battery recycling, always supported by our technical expertise and technological innovation.

This entire journey is inseparable from our historic commitment to people. Over decades, Tupy has built a culture deeply rooted in training, human development, and the cultivation of long-term careers. We continue to value technical expertise, collaboration, and respect at all levels of the Company—and our greatest asset: our people.

We are convinced that it is human and technological expertise that enables us to transform challenges into solutions that promote better living conditions.

Tupy S.A. Executive Board

Message from the Chairman of the Board of Directors

The foundry industry is integral to mobility, machinery and equipment, infrastructure, and energy sectors. It is energy- and natural resource-intensive.

Tupy operates in engineering, production, and has an international presence. It develops initiatives focused on resource use, material reuse, and process optimization.

The Board monitors the incorporation of environmental, social, and governance criteria into decisions. Management considers efficiency, resource use, and emissions.

The production process uses scrap metal as raw material and generates new products, reducing the use of primary raw materials and environmental impacts. The portfolio includes solutions for mobility, energy, and agribusiness, with a focus on energy efficiency and emissions.

Management prioritizes safety and employee development, with training and prevention programs. The Board monitors the integration of sustainability, risk, strategy, and capital allocation, based on transparency and compliance.

This report presents initiatives, results, and goals related to environmental, social, and governance issues.

The Board extends its gratitude to our employees, partners, and shareholders.

Jaime Luiz Kalsing
Chairman of the Board of Directors

Key indicators

Environmental

Indicators	Units of measurement	2023	2024	2025
Greenhouse gas (GHG) emissions intensity	tCO_2e per ton produced	1.17	1.18	1.22
GHG emissions – Scope 1	tCO_2e	560,113	493,052	402,778
GHG emissions – Scope 2 (market-based approach)	tCO_2e	187,596	168,133	155,771
Particulate Matter (PM) emissions intensity	kgPM/ton produced	0.926	0.851	0.798
Recycled metal material used in the process	%	95	96	97
Water reuse in the process	%	83	86	70

Social

Indicators	Units of measurement	2023	2024	2025
Employees, apprentices, and interns	Number	21,112	18,747	17,299
Women in the workforce	%	9.6	10.0	10.4
Health and safety index (accident frequency rate)	Number	9.89	8.95	7.64
Average training hours per employee	Number	20.9	14.0	22.4
People benefiting from social investment	Number	18,676	57,219	24,589
Social investment	BRL	2,888,720	3,589,816	849,709
Volunteer hours	Number	2,123	2,480	1,642
Value added to the economy	Billion BRL	11.2	10.6	10.4
Recall incidents	Number	0	0	0

Governance

Indicators	Units of measurement	2023	2024	2025
Women on the Board of Directors	%	22.2	22.2	11.1
Independent members on the Board of Directors	%	100	100	100
Taxes and contributions	Million BRL	633.5	808.7	825.4
Investment in research and development	Million BRL	84.4	58.5	46.3

About us

We are Tupy S.A., a Brazilian multinational engineering company with industrial operations in Brazil, Mexico, and Portugal and a commercial presence in the Americas and Europe, serving customers in over 40 countries. We develop and produce highly complex cast iron structural components, in addition to offering an integrated service chain that includes casting, machining, pre-assembly, assembly, technical validation, engineering, and logistics. Our portfolio covers solutions for various sectors of the economy, such as transportation, agriculture, infrastructure, energy, and the shipbuilding industry, among others, including multi-fuel technologies, biogas and biomethane applications, and an extensive network of spare parts.

Main brands

Fittings Tupy
Since 1938, a leader in safe, strong, and durable pipe fittings for industrial and commercial applications.

MWM
With over 70 years of history in Brazil, it is a global leader in the development and production of engines, power generation, and manufacturing contracts, offering comprehensive and sustainable solutions for rural and urban areas, supported by an extensive distribution and service network.

ShiftT
A startup accelerator that connects our industrial expertise with the potential of entrepreneurs to generate shared value, with 13 accelerated startups and over 300 mapped.









Business units

We have structured our operations into four business units, which allows us to offer comprehensive solutions aligned with current demands and the technological transformations impacting the global industry.

Structural Components

We develop and produce cast iron structural parts with high geometric and metallurgical complexity.

Solutions

- Engineering parts
- Engine blocks
- Cylinder heads
- Pre-machining services

Manufacturing Contracts

We offer a complete set of integrated industrial solutions, including engineering, logistics, machining, assembly, and technical validation services that ensure efficiency, standardization, and safety.

Solutions

- Solutions
- Machining
- Pre-assembly
- Assembly
- Engineering and logistics services

Energy & Decarbonization

Solutions for reducing emissions based on the principle of viable decarbonization—that is, mature technologies capable of reducing the carbon footprint while delivering economic benefits to customers and society.

Solutions

- Bioplants[1]
- Vehicle conversion
- Stationary generators
- Engines
- Lighting towers
- Motor pumps
- Marine applications

1. Focused on the production of biomethane and high-value-added fertilizers from organic waste.

Distribution

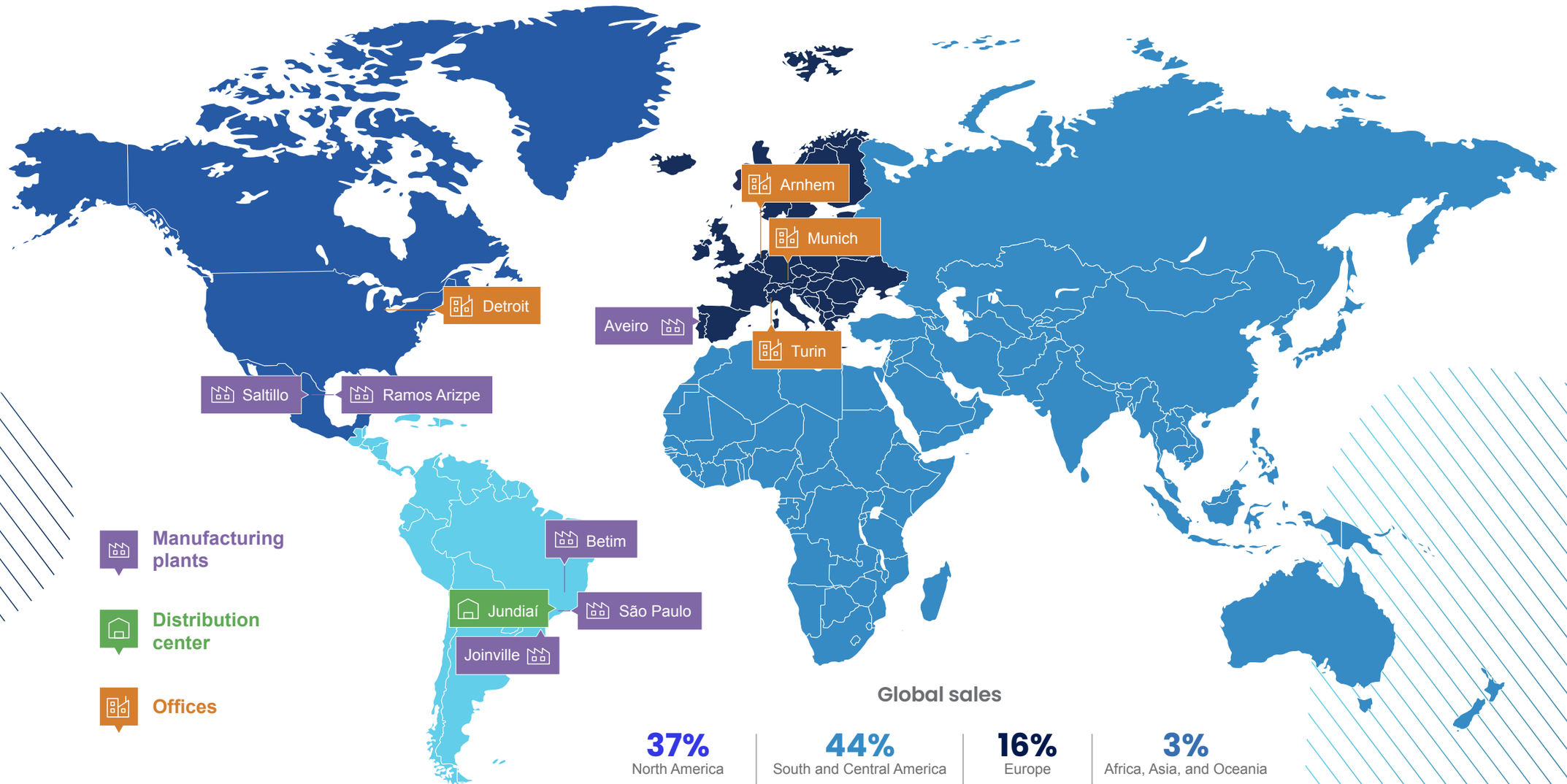
Cast iron products, such as profiles and pipe fittings, and automotive replacement parts, with a portfolio capable of serving different types of equipment.

Solutions

- Replacement parts
- Profiles[2]
- Pipe fittings

2. Cast iron bars used in various segments.

Operational map and markets served



Manufacturing plants

Distribution center

Offices

Global sales

37%	44%	16%	3%
North America	South and Central America	Europe	Africa, Asia, and Oceania

Awards and recognitions

Prêmio Valor Inovação Brasil

2nd place in the capital goods sector and 20th most innovative company in Brazil.

Melhores Empregadores do Brasil

Recognition awarded by Time, in partnership with Statista, highlighting our people management practices.

Prêmio Valor 1000

Ranking of the country's largest companies, based on economic, financial, and management indicators.

Prêmio Ser Humano (PSHsc)

Recognition for people management initiatives with a positive impact on human and organizational development.

Prêmio Expressão de Ecologia

An award that recognizes projects and initiatives making an effective contribution to environmental preservation.

500 Maiores do Sul (Revista Amanhã)

Ranking highlighting the companies with the greatest economic and institutional relevance in the southern region of the country.

Prêmio FINEP de Inovação (Southern Region)

Recognition of projects with a high degree of technological innovation and economic impact.

100 Open Startups Ranking

Simultaneous presence among the Top 100 of the year, Top 100 of the decade, and Top 10 in the sector.

Época Negócios 360° Ranking

Evaluates companies across multiple dimensions, such as financial performance, innovation, environmental, social, and governance (ESG) aspects, and vision for the future.

AI Lighthouse Awards (Enterprise Edition)

9th place in the first edition of the awards, organized by the Dom Cabral Foundation (FDC) in partnership with CI&T, recognizing the strategic application of artificial intelligence in the digitization of industrial processes.

Governance structure

We are a publicly traded company, with shares traded on B3's Novo Mercado, a segment that brings together companies voluntarily committed to corporate governance standards exceeding legal requirements. Our governance structure consists of the General Shareholders' Meeting, the Board of Directors, the Fiscal Council, Advisory Committees (Strategy, Innovation, and Sustainability; Audit and Risks; People, Culture, and Governance; and Finance and Investments), and the Executive Board. These decision-making and advisory bodies guide our strategy and ensure that business is conducted in an ethical and transparent manner.

Click here to access our governance structure.

Our main guidelines:

- Code of Ethics and Conduct;
- Bylaws;
- Anti-Corruption and Anti-Bribery Policy;
- Authority and Responsibility Policy;
- Policy for the Hiring of Independent Audit Services;
- Profit Distribution Policy;
- Securities Disclosure and Trading Policy;
- Donations and Sponsorships Policy;
- Board of Directors Election Policy;
- Crisis Management Policy;
- Risk Management and Internal Controls Policy;
- Policy for the Appointment of Members of the Board of Directors and Advisory Committees;
- Integrity Policy;
- Personal Data Protection Policy;
- Executive Compensation Policy;
- Related Party Transactions Policy;
- Human Rights Policy;
- Anti-Money Laundering and Counter-Terrorism Financing Policy; and
- Conflict of Interest Policy.

Risk management

Our Risk Management and Internal Controls Policy guides the identification, assessment, prioritization, and monitoring of risks across all areas, subsidiaries, and controlled entities, ensuring treatment commensurate with the criticality of each event. The process covers topics such as cybersecurity, exchange rate volatility, tax and labor issues, occupational safety, environmental risks, geopolitical exposure, and accounting and credit risks, in addition to a specific annual assessment of climate risks, considering physical, regulatory, technological, and reputational impacts.

In 2025, we strengthened our risk governance, with the Board of Directors now receiving bimonthly reports and the Statutory Audit and Risk Committee intensifying, in monthly meetings, the analysis of key risks and mitigation plans, while the Executive Committee maintained continuous monitoring at the operational level. We also restructured the executive team dedicated to this area, establishing dedicated leadership for the risk and internal controls agenda and increasing its integration with strategic projects. The consolidation of the Archer platform standardized processes globally and integrated risks, controls, and auditing into a single environment, enhancing managerial accountability and the maturity of our governance framework.

Click here to access our guidelines.

Ethics, integrity, and compliance

We conduct our activities based on the Tupy Integrity Program, designed to prevent, detect, and respond to compliance incidents, ensuring consistent ethical standards across all our operations.

In 2025, we strengthened this agenda through the global standardization of ethics guidelines, the expansion of the corporate training program—which reached over 2,700 hourly employees and executives—and the intensification of internal communication, including the incorporation of ethical topics into the Safety Dialogues. We also expanded the program to Mexico and made progress in preparing its implementation at our European units.

During the same period, we launched a booklet on combating harassment, renewed our membership in the Ethos Institute's Business Pact for Integrity and Against Corruption, and strengthened controls applicable to suppliers, with risk assessments and formal compliance requirements. The Compliance area reports directly to the Board of Directors through the Statutory Audit and Risk Committee, ensuring independence and continuous monitoring of the agenda.

Ethics Channels

Site
www.contatoseguro.com.br/en/tupy

E-mail
etica@tupy.com

Phone Numbers
Brazil: 0800 721 7895
México: 800 288 0150
Portugal: 800 180 431

In addition to the ethics channels, the email address **compliance@tupy.com** available to answer questions or provide advice.

Complaints in 2025

525 received

525 addressed

725 resolved[1]

1. 6.6% increase vs. 2024.

Actions taken in 2025

Internal audience

93 guidance

17 warnings

4 suspensions

35 terminations

Suppliers

7 notifications

Employee profile

We work to create an environment that welcomes and values every professional, promoting inclusion through practices that encourage participation and ensure equitable conditions for development.



17,656
employees

1,982
women in our workforce

39
nationalities

Talent development

In 2025, we made consistent progress in consolidating an integrated development model, structuring the Corporate Education area and organizing an Education Portfolio that connects onboarding programs, technical training, digital learning, knowledge management, and leadership development to the business strategy. In total, we provided 387,000 hours of training, averaging 22.4 hours per employee.

We also consolidated a performance evaluation model, combining goals, competencies, and values, while strengthening the practice of continuous feedback. During the year, 71.8% of eligible employees went through all stages of this cycle. The results guided development plans, promotions, and internal transfers, contributing to fair recognition and preparing teams for future challenges.

Young Apprentice Program

Offers training for young people aged 16 to 24 at the start of their careers, combining study at partner institutions with supervised work experience.

Internship Program

Integrates technical and college-level students into our teams, preparing talent for future opportunities.

Formare Program

Offers technical and vocational training for socially vulnerable youth in São Paulo (SP), combining education, citizenship, and job readiness.

Crescer Project

Provides training to socially vulnerable students in their second year of high school and in vocational programs.

Educação de Jovens e Adultos (EJA)

Expands access to basic education for employees and their families, enabling the continuation of studies and professional development.

Escola de Conhecimento Aplicado Tupy (ECAT)

Transforms knowledge into actions that generate impact on the core business, elevating the excellence of operational, technical, senior, and specialist employees.

Online training platforms

Provides a digital environment for continuous learning, organizing technical and behavioral content that supports the self-development of all employees.

First Leadership Program

Prepares employees for their first experience supervising teams, with a focus on communication, feedback, work organization, and people management.

Safety, health, and well-being



In 2025, we once again achieved our best performance in occupational safety, with improvements in frequency and severity rates and a reduction in the total number of accidents. The *Joinville* (SC) facility recorded, for the first time, zero lost-time accidents in a month, and other operations also achieved significant milestones. This result reflects the strengthening of our safety culture, driven by operational discipline, active leadership participation, and systematic monitoring of strategic indicators by senior management.

We consolidated important structural advances, such as the completion of the Corporate Health, Safety, and Environment Manual, comprising 16 minimum management standards, and the expansion of corporate guidelines, which increased from 29 to 40 standardized documents. We also maintained audits, inspections, behavioral observations, and specialized committees, reinforcing risk identification and the application of the hierarchy of controls. Employee engagement remained central, with Daily Safety Dialogues, mandatory training, and the systematic sharing of lessons learned from incident investigations.

We also consolidated significant advances in promoting comprehensive health, with the strengthening of Occupational Medicine, greater integration among technical teams, and progress in the preventive management of leave absences. The complete renovation of the *Joinville* (SC) outpatient clinic, featuring a new emergency room, structural improvements, and a dedicated ambulance, has become a model for future expansion to other units.

We also structured a new model for the reception and rehabilitation of employees on leave, expanding multidisciplinary follow-up and safe reintegration into the workplace. In addition, we strengthened programs such as Viva+, expanding physical, emotional, and social support for employees. The integration of these programs into leadership routines reinforced our commitment to quality of life, prevention, and continuous care.

Research and Development (R&D)

We continuously invest in R&D, balancing initiatives aimed at improving current operations with projects that target future opportunities. Our prioritization considers technical, environmental, economic, and social impacts, ensuring that each project is aligned with real market needs and contributes to strengthening our competitiveness. Throughout 2025, we allocated 46.3 million BRL to these projects, at different levels of maturity.

Key ongoing R&D projects

Technology Readiness Levels (TRL)[1]

1	2	3	4	5	6	7	8	9
Concept			Development			Industrialization		

1. We use the Technology Readiness Level (TRL) methodology as a reference, an international scale that classifies the degree of a technology's development.

Ultra Light Iron Technology — 8

The technology enables the production of cast iron engine blocks with a weight similar to that of aluminum.

Biomass briquettes — 7

Laboratory development of biomass briquettes to replace mineral coke in smelting furnaces.

Otto-cycle ethanol engine — 9

The engine offers good performance and contributes to the decarbonization of the sugar-energy sector.

Ethanol engine hybridization — 5

A hybrid system that combines an ethanol engine with electrification to increase energy efficiency and reduce costs.

Diffuse ethanol combustion technology (Diesel cycle) — 5

Use of ethanol in Diesel engines, with fuel switching and efficiency gains.

Second life for batteries — 6

The methodology evaluates used cells for reuse before recycling, extending their value and useful life.

Battery recycling — 7

Pilot plant recycles lithium batteries and recovers critical metals, validating efficiency at scale.

Material Resynthesis — 6

We have demonstrated the resynthesis of materials from recycled batteries with performance equivalent to that of new materials, thereby reducing costs.

Critical mineral processing — 4

We develop chemical routes for critical minerals, expanding applications in the energy transition.

Hydrogen engine technologies — 6

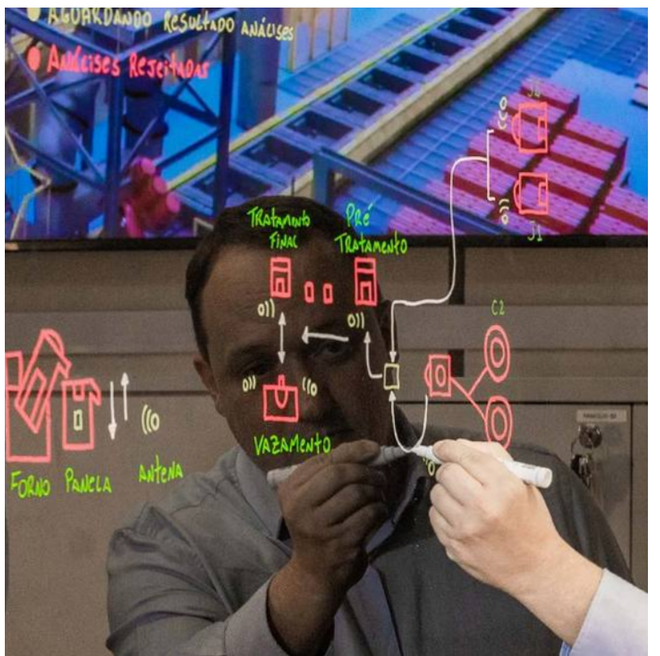
Hydrogen engine with direct injection in the Diesel cycle that delivers high performance and has advanced to testing.

Hydrogen-resistant alloys — 7

We have created cast iron alloys resistant to hydrogen embrittlement, validated through industrial testing.

Innovation

In 2025, our Open Innovation Portal, designed to connect our operations to the entrepreneurial ecosystem, recorded its best performance since 2022, with 100 submissions—39% more than in 2024— and dozens of proposals advancing to technical stages and industrial-scale testing, in addition to updating its strategic challenges, including a new focus on Mechanical Finishing and the incorporation of Natural Resources into the circular economy agenda. At the same time, we launched the third cycle of the ShiftT accelerator, bringing the total to 11 startups accelerated since its inception, three of which have already become suppliers, highlighting the program's maturity and its concrete contribution to value creation and applied innovation.





Digital Transformation

We accelerated our digital transformation journey in an integrated manner with our corporate strategy, expanding the digitization of operations across all units based on structured governance—in which we adopted the Joinville (SC) unit as a pilot plant—and an Industry 4.0 maturity map that guides the prioritization of initiatives. In this context, the expanded use of artificial intelligence (AI) was a key highlight, featuring classic AI applications aimed at optimizing casting processes and reducing waste, embedded AI solutions for automated inspections on production lines, and generative AI tools that support data analysis and decision-making.

We also made progress in standardizing internal systems and processes, integrating procurement and human resources platforms between Brazil and Mexico and approving the global migration to a new version of our enterprise management system, which will enhance security, reliability, and information integration. We expanded the use of systems that monitor production in real time in Mexico, modernized our technological infrastructure, and brought digital solutions to other business fronts, such as the *Ouro Verde do Oeste* (PR) biorefinery, consolidating the use of technology as a competency present throughout the organization.

Decarbonization solutions

In the search for renewable solutions that combine positive environmental impact with value creation, the following bioplants have established themselves as one of our most promising fronts for decarbonization:

- ***Ouro Verde do Oeste* (PR)**
The unit began operations in 2025, with a capacity of 1,440 cubic meters per day of biomethane and 20 tons per day of organic fertilizers.

- ***Seara* (SC)**
In 2024, we entered into a partnership with Seara, part of the JBS Group, to develop a bioplant for the production of organomineral fertilizer, biomethane, and carbon dioxide using waste from pig and poultry farming. The project, which involves approximately 200,000 pigs and 1.7 million birds, progressed through the licensing stages throughout 2025.

- ***Divinópolis* (MG)**
We made progress on construction of the bioplants at *Granja Rancho da Lua*, which will use waste from approximately 500,000 laying hens to generate electricity on-site and produce organomineral fertilizer for sale.



Sustainability

Sustainability is integral to our strategy and guides decisions focused on competitiveness, the energy transition, and viable decarbonization. In 2025, we advanced the maturation of the Vice Presidency of Institutional Relations and Sustainability, created the previous year, which structured processes, reviewed practices, and deepened the integration of the topic into strategic planning across all units. The Strategy, Innovation, and Sustainability Committee continued to support the Board of Directors in defining guidelines and monitoring socio-environmental risks and opportunities.

A leading role in the global climate agenda

In 2025, we expanded our engagement in the international climate agenda through active participation in the 30th United Nations Climate Change Conference (COP30). We contributed to discussions on sustainable mobility, the energy transition, and innovation applied to climate challenges, reinforcing our commitment to low-carbon industrial solutions.

Seven initiatives were selected for the SB COP Case Booklet, the official publication of Sustainable Business COP30 (SB COP), led by the National Confederation of Industry (CNI). The recognized projects, including initiatives from MWM and ShiftT, demonstrate our ability to transform innovation and engineering into concrete solutions for viable decarbonization.

Click here to access the SB COP Case Booklet.

ESG scores

In 2025, we achieved similar performance in environmental, social, and governance (ESG) assessments conducted by specialized agencies, reflecting the continuous evolution of our socio-environmental governance and alignment with the expectations of investors and other stakeholders.

ESG scores

	2023	2024	2025	Desempenho
CDP	C	C	C	↔
MSCI	BB	BBB	BBB	↔
S&P Global Ratings	38	42	41	↓
SUSTAINALYTICS	16.9	20.3	24.5	↓

Suppliers

We maintain a diverse supply chain, comprising small, medium, and large companies that supply both materials directly linked to production and services and other inputs supporting our operations. Among the areas with the highest volume and complexity are the purchase of scrap metal, the supply of electricity, logistics, and the provision of specialized services. In 2025, we had 12,908 active suppliers. Considering the states where we have facilities, 40% of the 7.2 billion BRL allocated to purchases during the period came from local suppliers. Whenever possible, we prioritize small and medium-sized companies located near our operations, recognizing the positive impact of this choice on job creation, income generation, and the revitalization of the regional economy.

During the period, we strengthened sustainable supply chain management, with new contracts signed based on social and environmental criteria, and 303 suppliers evaluated under the Development Program, which included workshops and structured monitoring. We also made progress in digitizing processes by consolidating the *Ariba* portal in Brazil and Mexico, reducing pending requisitions by approximately 84% and expanding the strategic role of the Procurement department.

Cliqck here to access our Suppliers page.



Customers

In 2025, we strengthened our relationship with our customers through greater operational discipline and improved service processes, in addition to enhancing the commercial interface, increasing proximity and responsiveness to technical demands. We began structuring a corporate process to consolidate the “voice of the customer” within the Structural Components unit, organizing feedback gathered during visits and commercial interactions to standardize service attributes, establish monitoring routines, and prevent the recurrence of issues starting in 2026.

As part of our commitment to continuous improvement, all our products undergo ongoing safety assessments throughout the production cycle. We have a Recall Policy that defines clear procedures for the prevention and management of potential risks to health, consumer safety, or property damage. In 2025, we recorded no cases of non-compliance or the need for large-scale recalls or component replacements.

Our value chain

SUPPLIERS



INDUSTRIALIZED COMPONENTS



ENERGY



NON-FERROUS MATERIALS



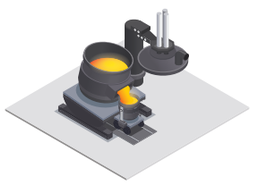
METALLICS



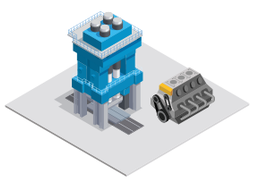
SERVICES



BUSINESS UNITS



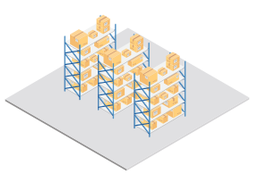
STRUCTURAL COMPONENTS
Production of engine blocks, cylinder heads, and engineered components used in engines and industrial systems.



MANUFACTURING CONTRACTS
Provision of specialized services, including machining, pre-assembly, assembly, and engineering.

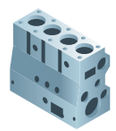


ENERGY & DECARBONIZATION
Development of energy and low-carbon solutions, including engines, generators, bioproducts, and Research & Development (R&D) projects in hydrogen and recycling.



DISTRIBUTION
Supply of aftermarket parts, pipe fittings, profiles, and technical support for the maintenance and operation of equipment.

PRODUCTS



- Engineered parts
- Engine blocks
- Cylinder heads
- Pre-machining services



- Machining
- Pre-assembly
- Assembly
- Engineering and logistics services



- Bioplants
- Vehicle conversion
- Stationary generators
- Engines
- Lighting towers
- Motor pumps
- Marine applications



- Replacement parts
- Continuous cast iron bars
- Pipe fittings

CUSTOMERS AND APPLICATIONS

AGRIBUSINESS



AUTOMOTIVE



CONSTRUCTION AND MINING



POWER GENERATION



INFRASTRUCTURE



NAVAL



TRANSPORTATION



Communities

Impact management and local development

We recognize that our operations have impacts on local communities and take responsibility for managing them in a structured and transparent manner. We work to maximize positive effects—such as job creation, income generation, training, and strengthening the local economy—and mitigate operational externalities. About 80% of our facilities have local development programs in their surrounding areas, covering operations in Brazil and Mexico. We maintain ongoing channels of dialogue, and in 2025, we expanded the Tupy and Community Meeting to include guided tours of our operations in *Joinville* (SC), strengthening transparency and active listening. During the period, we recorded 2 community complaints, a 33% reduction compared to the previous year.

Donations and Sponsorships

The management of donations and sponsorships follows a structured process, with a specific policy, an assessment of the integrity of supported institutions, and accountability requirements. In 2025, we revised the selection process using the A3 Lean methodology, making the process simpler and more efficient. Throughout the year, we allocated 849,708.53 BRL, of which 189,538.70 BRL came from our own resources and 660,169.83 BRL from incentive funds.

Engagement and social mobilization

The Tupy Transformers program has been mobilizing employees and their families in social initiatives since 2017. In 2025, 460 volunteers participated, dedicating 1,642 volunteer hours to initiatives carried out in partnership with local institutions. Throughout the year, we enhanced the initiative by creating the Volunteer Trail, making participation more structured and accessible, while also promoting solidarity campaigns aimed at vulnerable populations.

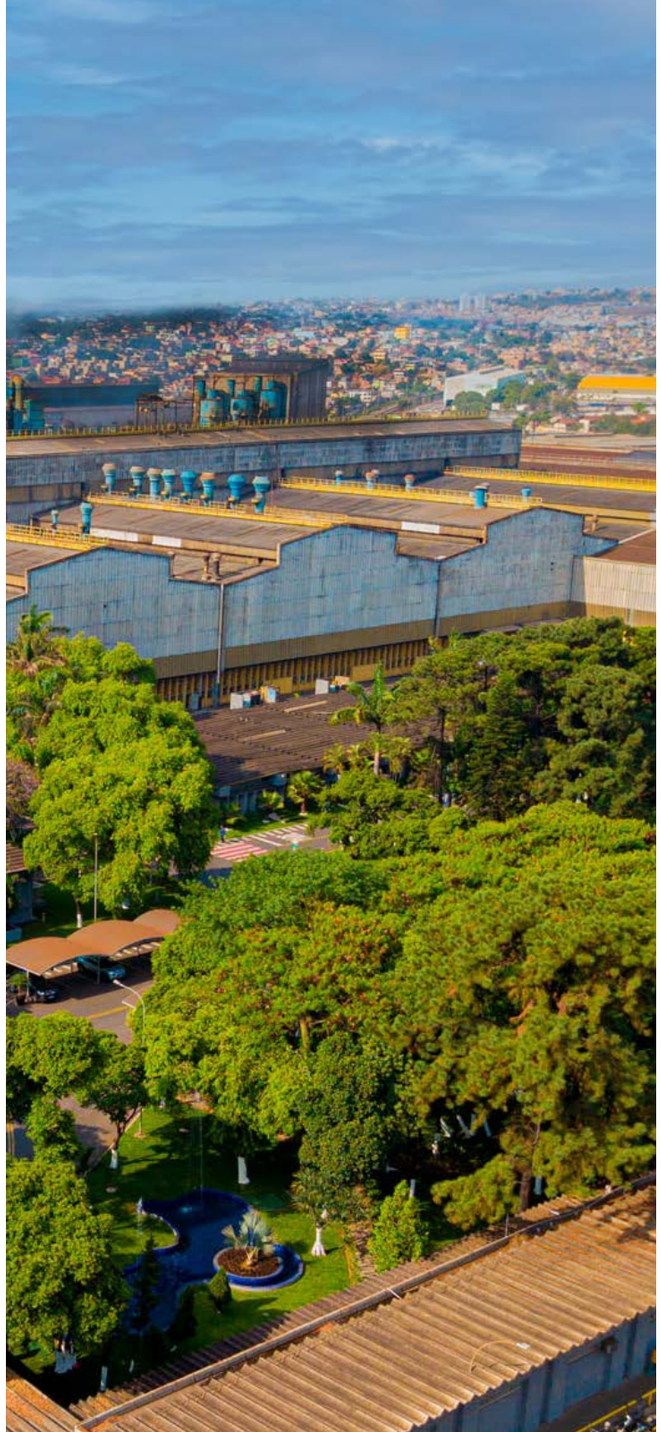


Environmental management

Environmental management is a fundamental element of how we operate and is guided by our Integrated Policy on Health, Safety, Environment, Quality, and Social Responsibility, supported by the Environmental Management System (EMS), which has been certified to the ISO 14001 standard since 2001 across all our operations.

Biodiversity

All operational units conduct systematic assessments of environmental aspects and impacts, classifying risks according to frequency, scale, and severity to define specific controls and mitigation plans. In 2025, we continued initiatives to restore areas and protect sensitive habitats, including SOS *Manguezais*, an initiative developed in partnership with local stakeholders aimed at the preservation and restoration of coastal ecosystems, featuring monitoring, environmental education, and community engagement. We also maintain 4,800 hectares of our own forest areas, which directly contribute to the conservation of fauna, flora, and biodiversity in the regions where we operate.



Water and effluents

Water plays a fundamental role in our production processes, being used, among other purposes, for cooling equipment and preparing industrial inputs. In 2025, 57.6% of the water collected came from local utilities or water trucks, 39.2% from groundwater sources, and 3.1% from surface water.

The reuse of treated effluent is a well-established practice in our operations, and in 2025, the corporate rate of treated effluent reuse was 70%. This represented the reuse of approximately 1.2 billion liters of water throughout the year, consumed or returned to our own production processes and support uses, such as furnace cooling, replenishment in cooling towers, industrial washing and cleaning, and sanitary flushing.

Energy efficiency

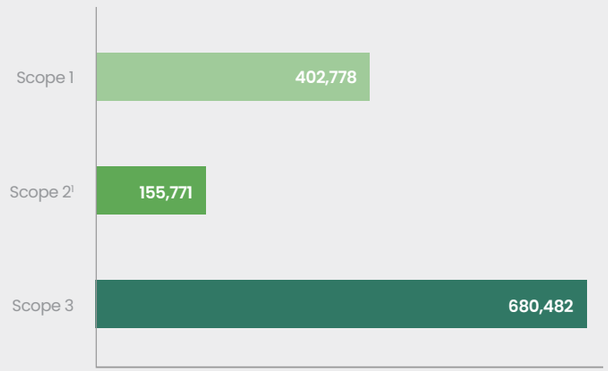
In 2025, we consumed 6,796,549 gigajoules (GJ) of energy, primarily from electricity, natural gas, and coke, the latter being essential for the operation of smelting furnaces. Even in a year marked by a significant drop in production, we maintained structured efforts to increase process efficiency. One of the main focuses was reducing specific coke consumption, combined with investments in cupola furnace retrofits, which enable better thermal efficiency, greater operational stability, and lower energy loss throughout the production process.

Emissions

The Company prepares its Greenhouse Gas (GHG) Emissions Inventory annually, in accordance with the GHG Protocol and ISO 14064, considering the operational control of its six plants. In 2025, Scope 1 emissions were 18% lower than in 2024 (-90,274 tCO_2e), and Scope 2 (market-based) emissions decreased by 4%. Scope 3 emissions increased by 10% due to the expansion of the inventory, which now covers seven categories, including Purchased goods and services and Fuel- and energy-related activities, the latter accounting for approximately 30% of total Scope 3 emissions. GHG intensity, calculated based on Scopes 1 and 2 over equivalent production, remained stable at 1.22 tCO_2e/t. The reductions were mainly driven by the use of recycled coke, the replacement of coal dust, and the use of coke with charcoal fines.

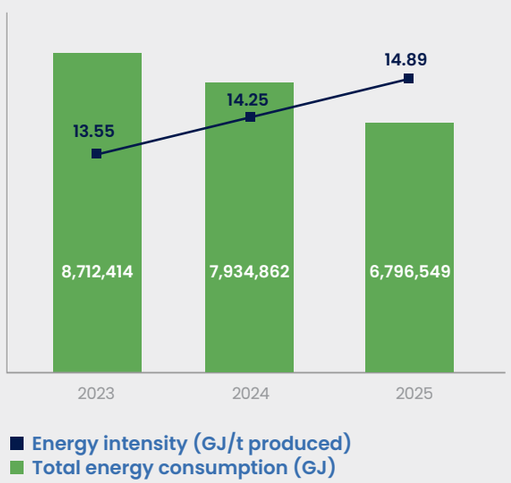
Regarding particulate matter emissions, in 2025, we recorded a 6.2% reduction in the emissions rate per ton equivalent compared to 2024. This result was supported by disciplined maintenance of filtration systems, continuous monitoring of chimneys, and greater operational maturity of the teams.

2025 GHG Inventory (tCO_2e)



1. Market-based approach.

Total absolute energy consumption and energy intensity





Circular economy

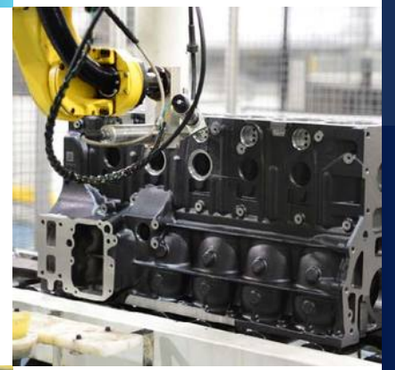
In 2025, we transformed 505,000 tons of ferrous scrap, our main raw material, into high-value-added products, reducing iron ore extraction and avoiding approximately 1.2 tCO_2e, given that its carbon footprint is approximately 92% lower than that of pig iron, a material derived from ore. We also expanded circularity through the full reuse of metal chips, in addition to the utilization of byproducts such as slag used in cement production, oils sent for re-refining, and wood waste transformed into fuel for other industries.

We have also made progress in post-consumer packaging management: 32% of the packaging for the Fittings Tupy and MWM brands was recycled through a partnership with *EuReciclo*, a company that structures and certifies environmental offsets for packaging, ensuring that an equivalent amount of materials is collected and properly sent for recycling by cooperatives and specialized operators.

Co-products

In 2025, we consolidated the Co-products division's operations as a strategic component of the circular economy, transforming industrial waste into raw materials for sectors such as cement, chemicals, and steel, rather than sending them to landfills. We also standardized processes, strengthened governance through the creation of the Co-products Standard, and expanded integration with areas such as Environment and Compliance. The period recorded 33.5 million BRL in revenue, the registration of 25 new co-products previously discarded, the reintroduction of 15,000 tons of materials into other production chains, and the generation of approximately 4 million BRL in avoided costs, demonstrating greater competitiveness and value added to waste.







Credits

Coordination

Vice Presidency of Institutional Relations,
Sustainability, Communications and Marketing

Materiality, indicator consulting, writing, graphic design, layout, infographics, and editing

TheMediaGroup

Photography

Tupy Archive

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